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IRD CLASS FROM RTM

paragrap h_id	segment_ allocation	req_title	text	new clarification text
ASTER-0010	SDPS CSMS	Applicability of ECS/SC F IRD	ECS and ASTER GDS shall conform to the IRD Between EOSDIS Core System and Science Computing Facilities with regard to the passing of data production software, and calibration coefficients, data product quality assurance information and other data between the two systems in support of data production software development for standard ASTER data products.	
ASTER-0020	SDPS	ASTER L1 Algorithms to EDC DAAC	ASTER GDS shall have the capability to send and ECS (EDC DAAC) shall have the capability to receive all algorithms, source code, and documentation used by the ASTER GDS to process ASTER Level 0 data to Level 1 and higher level standard products.	
ASTER-0030	SDPS	ECS ASTER Algorithms to Japan	ECS (EDC DAAC) shall have the capability to send and ASTER GDS shall have the capability to receive all algorithms, source code, and documentation used by ECS to process ASTER Level 1 data to higher level products.	
ASTER-0040	CSMS	LTSP to ASTER	ECS shall have the capability to send and ASTER GDS shall have the capability to receive EOS Long Term Science Plans.	
ASTER-0045	CSMS	LTIPs to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive EOS Long Term Instrument Plans.	

ASTER-0050	FOS	ASTER Data Base Updates to EOC	ASTER GDS shall have the capability to send and ECS shall have the capability to receive requests for updates to the ASTER operations data base.	
ASTER-0060	FOS	EOC data base updates to ASTER ICC	ECS shall have the capability to send and ASTER GDS shall have the capability to receive an updated EOC operations data base, containing at a minimum, spacecraft and instrument telemetry formats, limits, and associated information and ASTER instrument command formats and associated information.	
ASTER-0100	SDPS	DAR constraints	ASTER GDS shall have the capability to send and ECS shall have the capability to receive information on ASTER instrument operations and constraints that may be applicable to DAR specification. The ASTER instrument constraint information shall include (at a minimum): a. descriptive information for the ASTER instrument b. default settings for instrument configurable parameters c. range of values for instrument configurable parameters d. instrument constraint information	
ASTER-0110	SDPS	ASTER DARs to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive DARs for the ASTER instrument. DARs shall contain the following information, at a minimum: a. Observation number b. Experimenter identification c. Experimenter address d. Investigation identification e. Scientific discipline f. Observation repetition period g. Tolerance in observation time h. User priority	

ASTER-0120	SDPS	DAR Status from Japan	<p>ASTER GDS shall have the capability to send and ECS shall have the capability to receive DAR status, when requested by ECS. DAR status shall include such information as confirmation or rejection of the DAR, and notification of DAR scheduling and completion, to include at a minimum:</p> <ul style="list-style-type: none"> a. Date and time b. Instrument ID c. DAR ID d. Request status e. Implementation schedule f. If rejection, then the reason for the rejection. 	
ASTER-0130	SDPS	Requests for DAR Status	ECS shall have the capability to send and ASTER GDS shall have the capability to receive queries for the current status of ASTER DARs which were previously submitted to the ASTER GDS by ECS.	
ASTER-0200	FOS	EOC Planning Aids to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive planning aids (e.g., predicted orbit data, and spacecraft maneuver information).	
ASTER-0210	FOS	Instrument Resource Profiles to EOC	ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER instrument resource profiles and instrument resource deviation lists (when a resource profile exists).	<u>ASTER Short-Term Schedules (STS) shall be delivered to the EOC in "Instrument Resource Profile" or "Instrument Resource Deviation List" format.</u>
ASTER-0220	FOS	Resource Conflict Notification	ECS shall have the capability to send and ASTER GDS shall have the capability to receive a notification when ASTER instrument resource profile information cannot be integrated into the preliminary resource schedule.	

ASTER-0230	FOS	Preliminary Resource Schedule	ECS shall have the capability to send and ASTER GDS shall have the capability to receive a preliminary resource schedule. The preliminary resource schedule shall include, at a minimum, the following: a. Activity and DAR identifiers b. Resource availability and usage requirements c. Time constraints d. TDRSS schedule	
ASTER-0240	FOS	Instrument Activity Lists	ASTER GDS shall have the capability to send and ECS shall have the capability to receive instrument activity lists and instrument activity deviation lists (when an activity list exists) and any updates thereto.	<u>ASTER One-Day Schedules (ODS) shall be delivered to the EOC in "Instrument Activity List" or "Instrument Activity Deviation List" format.</u>
ASTER-0250	FOS	Activity Conflict Notifications	ECS shall have the capability to send and ASTER GDS shall have the capability to receive a notification when the ASTER instrument activities cannot be integrated into the detailed activity schedule.	
ASTER-0260	FOS	Detailed Activity Schedules	ECS shall have the capability to send and ASTER GDS shall have the capability to receive detailed activity schedules and any updates. The detailed activity schedule shall include, at a minimum, the following: a. Instrument activities b. Spacecraft activities necessary to support all instrument activities c. All spacecraft activities necessary for spacecraft subsystem maintenance d. Spacecraft resource requirements for each activity e. Traceability of instrument activities to DARs	

ASTER-0300	FOS	Instrument Operations Coordination	ASTER GDS shall have the capability to send and ECS shall have the capability to receive, both electronically and by voice, information to facilitate, at a minimum, the following: a. Planning of coordinated operations b. Resolution of conflicts c. Exchange of instrument status	
ASTER-0310	FOS	Instrument Operations Coordination	ECS shall have the capability to send and ASTER GDS shall have the capability to receive, both electronically and by voice, information to facilitate, at a minimum, the following: a. Planning of coordinated operations b. Resolution of conflicts c. Exchange of instrument status	
ASTER-0340	FOS	"What-if" Inputs	ASTER GDS shall have the capability to send and ECS shall have the capability to receive "What-If" planning and scheduling inputs.	
ASTER-0350	FOS	"What-if" Results	ECS shall have the capability to send and ASTER GDS shall have the capability to receive "What-If" planning and scheduling results.	
ASTER-0410	FOS	Command load generation status	ECS shall have the capability to send and ASTER GDS shall have the capability to receive command load generation status information, including at a minimum, the following: a. Spacecraft Control Computer (SCC)-stored command load report b. Integrated report having orbital events, command execution times, and TDRSS contacts with candidate loads	
ASTER-0520	FOS	Real time command groups	ASTER GDS shall have the capability to send and ECS shall have the capability to receive real time command groups requests .	

ASTER-0530	FOS	Instrument command uplink status	ECS shall have the capability to send and ASTER GDS shall have the capability to receive instrument command uplink status. Instrument command uplink status shall include (at a minimum): a. receipt of the command group at the EOC b. validation status at the EOC c. receipt of the command at the AM-1 spacecraft	
ASTER-0540	FOS	Pre-planned command groups	ASTER GDS shall have the capability to send and ECS shall have the capability to receive pre-planned command groups.	
ASTER-0550	FOS	Instr. contingency cmd notif.	ECS shall have the capability to send and ASTER GDS shall have the capability to receive instrument command notification when ECS issues emergency/contingency ASTER command groups.	
ASTER-0570	FOS	Instrument Status Data	ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER instrument status data.	
ASTER-0580	FOS	Spacecraft Status to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive AM-1 spacecraft status data.	
ASTER-0590	FOS	Mission Status Reports	ECS shall have the capability to send and ASTER GDS shall have the capability to receive mission status reports.	
ASTER-0600	SDPS	Instrument history log	ASTER GDS shall have the capability to send and ECS shall have the capability to receive instrument history log data and associated metadata.	
ASTER-0700	SDPS	Level 1a delivery to EDC	ASTER GDS shall have the capability to send and ECS (EDC DAAC) shall have the capability to receive Level 1a data products, including associated ancillary data, metadata, and browse.	

ASTER-0710	SDPS	Quick look products from Japan	ASTER GDS shall have the capability to send and ECS (EDC DAAC) shall have the capability to receive Quick Look Level 1 (TBD) data products, including associated ancillary data, metadata, and browse. [TBR]	
ASTER-0730	SDPS	O/A Orbit data anomaly notifications	ECS shall have the capability to send and ASTER GDS shall have the capability to receive orbit/attitude data anomaly notifications.	
ASTER-0740	SDPS	Repaired/refined orbit data	ECS shall have the capability to send and ASTER GDS shall have the capability to receive repaired/refined orbit data provided to ECS by the GSFC Flight Dynamics Facility.	
ASTER-0750	SDPS	Repaired/refined attitude data	ECS shall have the capability to send and ASTER GDS shall have the capability to receive repaired/refined attitude data provided to ECS by the GSFC Flight Dynamics Facility.	
ASTER-0760	SDPS	Data Avail. Schedule from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive data availability schedules for ASTER GDS data products which were requested by ECS.	
ASTER-0770	SDPS	Data Avail. Schedule to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive data availability schedules for ECS data products which were requested by ASTER GDS.	
ASTER-0780	SDPS	Schedule adjudication to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive schedule adjudication data.	
ASTER-0790	SDPS	Schedule adjudication from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive schedule adjudication data.	

ASTER-0800	SDPS	Dependent Validations to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive dependent valids information related to ECS data products.	
ASTER-0805	SDPS	Dependent valids from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive dependent valids information related to ASTER GDS data products.	
ASTER-0810	SDPS	Directory metadata to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive directory metadata related to ECS data products.	
ASTER-0815	SDPS	Directory metadata from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive directory metadata related to ASTER GDS data products.	
ASTER-0820	SDPS	Inventory Search to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive inventory search requests.	
ASTER-0825	SDPS	Guide search to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive guide search requests.	
ASTER-0830	SDPS	Browse requests to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive browse requests.	
ASTER-0835	SDPS	Inventory search results from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive inventory data search results.	
ASTER-0840	SDPS	Guide search results from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive guide search results.	
ASTER-0845	SDPS	Browse results from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive browse results.	

ASTER-0850	SDPS	Inventory search to ECS	ASTER GDS shall have the capability to send and ECS shall have the capability to receive inventory search requests.	
ASTER-0855	SDPS	Guide search to ECS	ASTER GDS shall have the capability to send and ECS shall have the capability to receive guide search requests.	
ASTER-0860	SDPS	Browse requests to ECS	ASTER GDS shall have the capability to send and ECS shall have the capability to receive browse requests.	
ASTER-0865	SDPS	Inventory results from ECS	ECS shall have the capability to send and ASTER GDS shall have the capability to receive inventory search results.	
ASTER-0870	SDPS	Guide results from ECS	ECS shall have the capability to send and ASTER GDS shall have the capability to receive guide search results.	
ASTER-0875	SDPS	Browse results from ECS	ECS shall have the capability to send and ASTER GDS shall have the capability to receive browse results.	
ASTER-0880	CSMS	Authentication request from ECS	ECS shall have the capability to send and ASTER GDS shall have the capability to receive user authentication requests for ASTER GDS privileges of EOSDIS users.	
ASTER-0885	CSMS	Authentication results to ECS	ASTER GDS shall have the capability to send and ECS shall have the capability to receive user authentication information specifying ASTER GDS privileges for EOSDIS users.	
ASTER-0890	CSMS	Authentication request to ECS	ASTER GDS shall have the capability to send and ECS shall have the capability to receive user authentication requests for ECS privileges of ASTER GDS users.	
ASTER-0895	CSMS	Authentication results to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive user authentication information specifying ECS privileges for ASTER GDS users.	

ASTER-0900	SDPS	Product requests to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive product requests for ASTER GDS data products.	
ASTER-0905	SDPS	Product generation req. to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive product generation requests for ASTER GDS data products. Product generation requests will include an associated product distribution request.	
ASTER-0910	SDPS	Product Delivery Status from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive product delivery status information. Product delivery status information contains the following information, at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than the latest completion time specified by the user, adjusted start and stop times.	
ASTER-0915	SDPS	Product Del. Status Req. to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive requests for product delivery status.	
ASTER-0920	SDPS	Product Requests from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive product requests for ECS data products.	
ASTER-0925	SDPS	Product Generation Req. from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive product generation requests for ECS data products. Product generation requests will include an associated product distribution request.	

ASTER-0930	SDPS	Product Del. Status to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive product delivery status information. Product delivery status information contains the following information, at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than the latest completion time specified by the user, adjusted start and stop times.	
ASTER-0935	SDPS	Product Del. Status Req. from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive requests for product delivery status.	
ASTER-0940	SDPS	ECS Data Products to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive Level 0 - Level 4 data products, including associated ancillary, metadata, and browse.	
ASTER-0945	SDPS	ASTER GDS Data Products to ECS	ASTER GDS shall have the capability to send and ECS shall have the capability to receive Level 1b - Level 4 ASTER data products, including associated ancillary, metadata, and browse.	
ASTER-0950	SDPS	Ancillary data to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive ancillary data, including associated metadata.	
ASTER-0955	SDPS	Correlative data to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive correlative data, including associated metadata.	

ASTER-0960	SDPS	Ancillary data from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive ancillary data, including associated metadata.	
ASTER-0965	SDPS	Correlative data from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive correlative data, including associated metadata.	
ASTER-1000	CSMS	System & Network Mgmt Info to Japan	ECS shall have the capability to send and ASTER GDS shall have the capability to receive ECS system and network management information.	
ASTER-1005	CSMS	Req. for ASTER network mgmt info	ECS shall have the capability to send and ASTER GDS shall have the capability to receive requests for ASTER GDS network management information.	
ASTER-1010	CSMS	System & Netwk Mgmt info from Japan	ASTER GDS shall have the capability to send and ECS shall have the capability to receive ASTER GDS system and network management information.	
ASTER-1015	CSMS	network mgmt info request to ECS	ASTER GDS shall have the capability to send and ECS shall have the capability to receive requests for ECS <u>network system</u> management information.	
ASTER-1020	CSMS	ESN connection to JPL pickup point	ECS shall provide (via GFP PSCN circuits) the necessary communications connections to the ASTER designated pick-up points (at JPL) for the U.S. Gateway for ESN (mission success) communications.	
ASTER-1030	NONE	ASTER-to-Trans Pacific Link	ASTER GDS shall provide the necessary communications connections to the trans-Pacific link.	

ASTER-1040	CSMS	ESN services at JPL gateway	ECS shall provide protocol translation (TBR), termination, bridging, and routing for ESN communications interfaces to the U.S. Gateway for ASTER GDS communications.	
ASTER-1045	NONE	ASTER services at trans-Pac Link	ASTER GDS shall provide any necessary protocol translation, termination, bridging, and routing for ASTER GDS communications interfaces to the trans-Pacific link for ECS communications.	
ASTER-1060	FOS SDPS CSMS	ECS support of TCP/IP	ECS shall provide support for Transport Control Protocol/Internet Protocol (TCP/IP) [TBR] communications protocols to the U.S. Gateway for ASTER GDS communications.	
ASTER-1065	NONE	ASTER GDS support of TCP/IP	ASTER GDS shall provide support for Transport Control Protocol/Internet Protocol (TCP/IP) [TBR] communications protocols to the trans-Pacific link for ECS communications.	
ASTER-1080	FOS CSMS SDPS	Security	<u>The interface between ECS and ASTER GDS shall be compliant with the interface guidelines identified in the ECS Security Plan.</u>	
ASTER-2000	SDPS CSMS FOS	ECS RMA	ECS functions shall have an operational availability (computed as defined in the Functional and Performance Requirements Specification for the EOSDIS Core System) of 0.96 at a minimum and a Mean Down Time (MDT) of four (4) hours or less, unless otherwise specified.	

ASTER-2030	FOS	ECS RMA for real time functions	The ECS FOS shall have an operational availability of 0.99925 at a minimum and a MDT of five (5) minutes or less for real time functions that support: a. Launch b. Early orbit checkout c. Disposal d. Orbit adjustment e. Anomaly investigation f. Recovery from safe mode g. Routine real time commanding and associated monitoring for spacecraft and instrument health and safety.	
ASTER-2040	FOS	ECS RMA for TOOs	The ECS FOS shall have an operational availability of 0.992 at a minimum and a MDT of (1) hour or less for functions associated with Targets of Opportunity (TOOs).	
ASTER-2060	SDPS	ECS RMA for receiving science data	The ECS SDPS function of receiving science data shall have an operational availability of 0.999 at a minimum and an MDT of two (2) hours or less.	
ASTER-2080	CSMS	ECS RMA for mgmt info	The ECS function for gathering and disseminating management information shall have an operational availability of .998 at a minimum and an MDT of 20 minutes or less, for critical services.	
ASTER-4000	NONE	ASTER GDS RMA	The ASTER GDS shall have an operational availability of 0.96 at a minimum and a Mean Down Time (MDT) of four (4) hours or less, unless otherwise specified. [TBD]	
ASTER-4030	NONE	ASTER GDS Real Time RMA	The ASTER GDS shall have an operational availability of 0.99925 at a minimum and a MDT of five (5) minutes or less for real time functions. [TBD]	

ASTER-4040	NONE	ASTER GDS RMA for TOOs	The ASTER GDS shall have an operational availability of 0.992 at a minimum and a MDT of (1) hour or less for functions associated with Targets of Opportunity (TOOs). [TBD]	
ASTER-4060	NONE	ASTER GDS RMA: receiving sci data	The ASTER GDS function of receiving science data shall have an operational availability of 0.999 at a minimum and an MDT of two (2) hours or less. [TBD]	
ASTER-4080	NONE	ASTER GDS RMA for mgmt info	The ASTER GDS function for gathering and disseminating management information shall have an operational availability of .998 at a minimum and an MDT of 20 minutes or less, for critical services. [TBD]	
ASTER-5000	SDPS	Level 1a Volume	The estimated volume of ASTER Level 1a data sent from the ASTER GDS to ECS is 131.472 GB/day.	
ASTER-5010	SDPS	Level 1b Volume	The estimated volume of ASTER Level 1b data sent from the ASTER GDS to ECS is the data volume that results when at least 40% of the ASTER Level 1a data is processed to Level 1b.	